

SINGLE ROTOR

All of the simple drawings that appear here are the representation of the basic hydraulic machine principle used by the TZUY TURBINE.

In FIG. 1A we can see a stationary left cover, a blade on the left side of the rotor with a shaft and a stationary right cover. In FIG. 1B we can see the drawing drawn in front view. The rotor with shaft is in between the stationary left cover and stationary right cover. One end of the rotor shaft protrudes to the left cover and the other end of the rotor shaft protrudes also to the right cover.

Let's make some kind of mental experiment

In FIG. 1B when the powerful working fluid flows inside the turbine between the stationary left cover and the rotor, the rotor which is movable will be pushed towards the stationary right cover and will have great static friction on the two surfaces. The surface of the rotor and the surface of the right cover are the two involved surfaces.

In FIG. 2C We can see a stationary left cover, a blade on the right side of the rotor with a shaft and stationary right cover.

In FIG. 2D We can see the drawing drawn in front view. The rotor with a shaft is in between the stationary left cover and stationary right cover.

In FIG. 2D when the powerful working fluid flows inside the turbine between the stationary right cover and the rotor, the rotor which is movable will be pushed towards the stationary left cover and will press the stationary left cover hard causing also a great static friction on the two surfaces, the left surface of the piston and the surface of the left cover.

We can therefore say that a single rotor turbine using a hydraulic machine principle to spin or rotate a mechanical rotary devices can really expect a great side thrust friction. What we need to solve this simple problem is to use a twin rotor turbine to remedy each turbine's side thrust that cause too much friction. Through this mechanical arrangement side thrusts in twin rotors can be totally neutralized. This simple idea is applied in TWIN-ROTOR TZUY TURBINE to amplify or boost its rotational power due to neutralized side thrust friction.